Letter to the Editor

Comment on "Thermodynamics and kinetics of adsorption of Cu(II) onto waste iron oxide"

A research paper entitled as above [1] was published by Huang et al. in *Journal of Hazardous Materials*. In Section 3.3 of that paper, it stated "The first-order Lagergren equation (10), the pseudo-second order rate equation (11) and the second-order rate equation (12) were evaluated from the experimental data to evaluate the rate of adsorption of Cu^{2+} onto the F1 adsorbent". The authors also cited Benguella and Benaissa [2] as a secondary reference for these rate equations. The authors have unknowingly made a quotation error regarding the kinetic equations. A comment to Benguella and Benaissa's paper was published [3] and Benaissa [4] replied that "We agree with the comment of Dr. Y.S. Ho on our manuscript published in Water Research 36 (10), 2463–2474 (2002). In spite of our best efforts with the resources available to us, we were unable to obtain the reference in question but now acknowledge the value of the paper and the work of Dr. Ho and will refer to it in any future publications." The reference section of a research article allows researchers to follow the study or find additional useful information from the paper [3], and thus, it is always better to cite the original papers to grasp the original thoughts [5]. In the paper [2], authors cited Raji and Anirudhan [6] and Zhang et al. [7] for Lagergren's equation as secondary materials. The citation style is incorrect in both the papers. A better reference might be citing the original Lagergren's paper was first presented by Ho and McKay in 1998 [8]. That is 'Lagergren, S. (1898), Zur theorie der sogenannten adsorption gelöster stoffe. *Kungliga Svenska Vetenskapsakademiens. Handlingar*, Band 24, No. 4, 1–39.' Its English version is 'Lagergren, S. (1898), about the theory of so-called adsorption of soluble substances. *Kungliga Svenska Vetenskapsakademiens, Handlingar*, Band 24, No. 4, 1–39.' and the abbreviation style is 'Lagergren, S. (1898), Zur theorie der sogenannten adsorption gelöster stoffe. *K. Sven. Vetenskapsakad. Handl.*, Band 24, No. 4, 1–39'. The citation of Lagergren kinetic rate equation on adsorption reactions was also reported [9]. Thus, the pseudo-second order kinetic equation (11) is not correct in Huang et al. paper and cited paper [2]. The second-order rate equation (12) is the same as the pseudo-second order kinetic equation [10,11]. My suggestion is that Huang et al. could cite the original papers and follow the original way of expressing the related equations and the references.

References

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